

ABSTRACT

The concentration of air or other agents in a fluid delivery line is determined by monitoring agent signals and processing those agent signals along with information regarding the age of each agent signal. The processor determines a primary agent concentration value based on the received agent signal values, with the primary agent concentration value determined by giving greater weight to more recent agent signal values. Where the primary agent concentration value exceeds a primary threshold value, an alarm signal may be activated. The processor also may determine a secondary agent concentration value, which may be determined from the actual agent signal values instead of the weighted agent signal values. Where the secondary agent concentration value exceeds a secondary threshold value, an alarm signal may be activated.